/569 cont./

147 result of the way they are forced to sit and to work, not, however, of their diet.

262 To every stranger the most striking fact is that the Fuegians can get along with almost no food from the vegetable kingdom. What they eat in the way of fungi and berries occasionally, but always in modest amounts, cannot bear comparison with their uninterrupted meat diet. It is obviously an exaggeration for individual travelers to regard their eating of Cyttaria fungi as worth mentioning. The berries of Pernettya and Berberis have no nourishment, nor have the stalks of Apis, the leaves of Taraxacum, and the roots of Armeria. Cereals, that is, bread and flour, legumes and tubers, fruit and vegetables are unknown to the Fuegian. In summer a person will sometimes eat three or four handfuls of amáiro gur at one time, which are the berries of Pernettya mucronata, or šépisamájm, the berries of Empetrum rubrum, and if there is a famine, he will eat only Cyttaria fungi for a few days. This, however, can never be upheld as a vegetarian meal (331) since it is obviously only a slight refreshment, an

> 331. The members of the Mission Scientifique maintain with Hyades (q):338 about the Yamana: "We never saw them make a meal of only vegetable foods" /translated from French/. Other reliable observers report it just as scarce.

expedient, or a very occasional tickling of the palate.

263 The invariable meat diet in itself scarcely gives them any real desire /570/ for salt, although all the meat is extremely fat. The meat salts probably suffice for the human body, and beyond that it gets, almost unconsciously and unnoticed, a not inconsiderable amount of salt from the sea water. In the shells of Mytilus and other mussels, in the calcareous shells of sea urchins and crabs, there is always a small amount of sea water, even though the contents have been cooked. When pieces of [252] meat of birds and seals are washed off, the Indians prefer to use sea water from which a tiny amount of salt inevitably remains on the meat.

/570 cont./

263 [271] on the meat. Finally, without conscious intent, the Indians take the ocean spray, even larger drops, into their mouths when it strikes their faces while they work in the canoe or on the beach. These individually very insignificant particles of salt I should estimate as a not too small daily total in view of the high salt content of sea water (332). The Yamana need a somewhat larger

332. We look in vain for any reference to this among those Europeans who have only expressed their astonishment at the absence of salt. All the missionaries and many travelers report that the food is not specially salted, for example, Outes (g):52, Hyades (q):339, and others. The latter (d):306 also maintains: "Sea salt as a condiment is unknown and would not be appreciated" /translated from French/; it is much sharper than cooking salt, as is well known.

amount of salt than the Selk'nam because they eat considerable amounts of light fat daily and because the meat juice of all the animals they consume contains far less salt than guanaco meat. This amount of salt is supplied to their bodies unconsciously, so to speak, but very definitely, and for this reason they do not need to sprinkle additional salt on their roast.

It is not surprising that the Fuegians are also unacquainted with any kind of spices and stimulants. Without reservation Hyades [276] (d):306 emphasizes: "They do not use any intoxicating, narcotic, or stimulating substance" /translated from French/ and adds in another place (f):564 that they do not have "condiments." This designation includes pepper and nutmeg, cloves and caraway, 262 vinegar, and similar things. Liquid fat, however, from seals and whales, if one wishes to include that here, is very often taken in small amounts (333), but it serves the natives as actual

333. Hyades (f):564 confirms that "seal oil is very much enjoyed and that the natives drink it with pleasure in small amounts, before or after the meal" /translated from French/.

/570 cont./

262 nourishment of very considerable importance.

For sweets, which they must painfully do without, they show
263 almost a passion, probably for that very reason. They have only temporarily at their disposal the ripe berries with low sugar content from the well-known shrubs. In early summer they take the nectar out of the blossoms of máku (Embothrium coccineim) with their tongues, chew the sweetish petals of the rare Philesia buxifolia, and suck the sweet young shoots of Poa flabellata, the type of grass that they use as litter for their beds (p. 31). Finally they peel a piece of bark from young tree trunks in the spring. /571/ Exerting pressure, they scrape a mussel shell along the exposed fibrous layer, from below upward. In the process the sweetish sap, ulkéx, collects in the mussel shell and they drink it. All this taken together is still only a tiny amount of sweets.

263 Nowadays our Indians always procure sugar first whenever
177 possible, and that abundantly (334). As may be expected, they

334. Along with other observers Hyades (f):564 emphasizes that they show "a real passion for natural sugar and heavily sweetened substances" /translated from French/.

use it indiscriminately and lavishly. They are guided, however, not so much by the physiological need, but far more by their enjoyment of it (335). Their partiality for onions is also re-

335. I noticed the same behavior among the Selk'nam (Vol. I, 293).

markable. The cooked meat of crabs, especially axíya (Lithodes antarctica) and kekflus (Paralomis verrucosus), is very tasty prepared with a little vinegar and chopped onions. The Yamana, without exception, are enthusiastic about this. Nowadays if they cook a meal of beans or rice or other legume, they naturally use cooking salt; only when they do not have it do they stir up the mixture with sea water. The addition of salt is demanded in this type of food which tastes flat even when larger pieces of meat of

/571 cont./

263 177 sea birds or seals are cooked in it. Along with European foods, the desire for salt was introduced there.

273 177 In the entire vegetable kingdom of the Cape Horn region there is not a sufficient amount of a single fruit that would be suitable for the manufacture of alcoholic beverages. The latter were unknown to the Yamana until they were offered to them by Europeans. The navigators of earlier times often noted that our natives could not develop a taste for spirits. They have come to it only through frequent use in the last few decades (336). Whiskey is almost never

336. Dabbene (b):187 from his own experience says: "Formerly they did not like alcoholic beverages, but now they have become accustomed to them through their contact with civilization and ardently desire them" /translated from Spanish/. Wieghardt: 37 and others say the same.

[439] 733 available to them; instead they get the thick red wine from the Mendoza region, which they call sépa, "blood." When they have an opportunity, they put a great deal of this into their stomachs, and since their nerves react to it immediately, they drag their drunkenness with its attendant symptoms about with them for days. A small amount is very hard on these natural people who are not accustomed to it, and the damage to their health is inestimable (p. 351 /untranslated/) (337). A few /572/ persons, such as Nelly

337. Duse:93 writes that when in those distant regions "civilization obtruded and brought along its inevitable accompaniments [alcohol and tobacco], it became clear that these sons of the wilderness [the Selk'nam] did not place any value on them. The Yahgan, on the other hand, quickly fell victims to the new luxuries and were capable of giving up their last skin [of seal and otter] for a piece of tobacco or a drink of whiskey." Compare in this connection the more detailed account on page 348 /untranslated/.

2: Cooper E-4 (no date) 1946 SHS Yahgan SHS

262 Lothrop (1928, p. 32) rated the relative importance in the *Yahgan* dietary of their foods as follows: (1) Easily of first importance, mussels; (2) next, seals, and fish of many kinds; (3) next, porpoises, gulls, and bird eggs; (4) then, whales, limpets, crabs, sea urchins, geese, penguins, cormorants; (5) last and least, otter (chiefly in the west), guanaco (only in the east), conchs, ducks, berries (especially wild black currants). The fungi eaten were those growing on trees; those growing on the ground were not eaten. Some wild celery and wild pernips and two varieties of cress and young shoots of tussock grass were also eaten. Foxes were eaten only in famine as a last [263] resort. Salt was not used.

225 Hunting.—Seals were hunted with spear or harpoon from canoes or from land (pl. 38), or killed with clubs. Whales were occasionally hunted in the open sea with spear or harpoon; stranded or dead whales were eagerly exploited. Dogs helped in otter and fox hunting.

223 Cormorants were taken at night by twilight with clubs; also with a pronged wooden gorge hook. Birds were taken with pole snares (fig. 11, *d*) and with single or multiple tether snares of sinew or whalebone. No lifting pole snares, deadfalls, or pitfalls are reported.

226 Fishing and sea-food gathering.—Mussels were gathered by hand; limpets, with a flat-ended stick; sea urchins, with a four-pronged wooden fork; crabs and other Crustacea, with a harpoon or a three-pronged stick. For taking sea fowl, the *Yahgan* also used a spear with two diverging shanks or two to four spears lashed together. Women fished with a kelp stem or braided whale-sinew line, that had a slipknot of whalebone or of quill at the end, instead of a hook, to hold the bait; slowly drawing the fish to the surface, they would grab it by hand. Fishhooks were probably lacking. Weirs of brambles or stakes were used. True fish nets were absent. The nearest approach thereto was a small basket attached to the end of a pole and used as a sort of dip net for diminutive fish.

251 Food storage.—Limited quantities of dried tree fungi were stored; so too was oil, especially whale and seal oil.

415 Food preparation and eating.—Large stained shells were used for
258 melting fat and holding grease. Water was heated and grease melted by throwing hot stones into them, but there is no record of stone boiling proper.

Shells of large mussels were sometimes used as plates; shells or bark baskets as cups; hollow bird bones or reeds as drinking tubes.

CAMPS AND HABITATIONS

361 There were no permanent villages. Certain groups of natives re-
621 lated apparently by blood and marriage frequented and occupied more or less fixed separate localities within the respective five sub-